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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,292	02/27/2004	James Albert Brenton	11000060-0043	7617
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IP Department Sonnenschein Nath & Rosenthal LLP P.O. Box 061080 Wacker Drive Station Chicago, IL 60606			EXAMINER KANE, CORDELLA P	
			ART UNIT 2432	PAPER NUMBER
			MAIL DATE 12/16/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/789,292

**Applicant(s)**

BRENTON ET AL.

**Examiner**

CORDELIA KANE

**Art Unit**

2432

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6, and 8-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6 and 8-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/5508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 22, 2008 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1 – 4, 6, and 8 – 24 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Objections***

3. Claim 6 is objected to because of the following informalities: the term inband is used. In previous claims in-band had been used. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 6, and 8 – 10, and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention. In claim 6, It is unclear what is authenticating the user or establishing the pathway.

6. Claim 15 recites the limitation "The media of claim 11, wherein requesting a dial up number...". There is no step of requesting a dial up number on claim 11 and therefore lacks antecedent basis.

***Claim Rejections - 35 USC § 103***

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 1 – 4, 6, 10 - 14, 16 - 22, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Staples et al's US Publication 2002/0118671 A1, and further in view of Smith et al's US Publication 2003/0018916 A1.

9. Referring to claim 1, Staples discloses:

a. A first network configured to enable a user computing device to access remote network elements (Figure 3a-Figure 6, page 10, paragraph 133).

b. A firewall in communication with said first network and configured to restrict access to said first network and the user (Figures 3a and 4, page 8, paragraph 111).

c. A router in communication with said firewall and a remote network element, an in-band access path defined by a communication path between the user, and remote network element via said first network, firewall and router (Figures 4 and 6, page 12, paragraph 157).

- d. A first server in communication with said firewall (Figure 4).
  - e. An out of band access path defined by a communication path between the user, and remote network element via said first network, firewall (page 8, paragraph 111), first server and PSTN (Figure 3B).
  - f. The first server configured to:
    - i. Receive a request to communicate with one or more remote network elements over the out of band access path (page 10, paragraph 139).
    - ii. Authenticate a user (page 8, paragraph 117).
    - iii. Facilitate a session with a second server for establishing a connection with an external network element (page 10, paragraph 139).
    - iv. Establish a secure path over the out of band access path between the user computing device and the one or more remote network elements (Figure 6, page 6, paragraph 73).
    - v. Transmit data for communication operational status of the one or more remote network elements between the one or more network elements and the user computing device over the secure pathway (page 10, paragraphs 138-140).
10. Staples does not explicitly disclose a modem bank connected to a plurality of modems operable to authenticate the request and communicate. However, Smith discloses a modem bank connected to a plurality of modems that authenticates and provides a connection to remote elements (page 2, paragraph 16). Staples and Smith

are analogous art because they are from the same field of endeavor, networks. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Staples and Smith before him or her, to modify the system of Staples to include the modem bank of Smith. The suggestion/motivation for doing so would have been that traditional phone connections incur significant costs on each side of the carrier (page 2, paragraph 16).

11. Referring to claim 2, Staples teaches the second server operable to select a specific modem (page 10, paragraph 139).
12. Referring to claim 3, Smith teaches that the first server is able to log invalid login attempts (pages 2-3, paragraph 24).
13. Referring to claim 4, Staples teaches that the first server is capable of allowing specific access to privileged users (page 9, paragraphs 116-117).
14. Referring to claim 6, Staples teaches:
  - g. Communicating between a user computing device and a network element via an in-band access path, the in-band access path including a firewall and a router (Figures 4 and 6, page 12, paragraph 157).
  - h. Communicating between the user computing device and the network elements via an out-of-band access path, the out of band access path including the firewall, a first server and a public switched telephone network (Figure 3B).
  - i. Requesting access, from the user computing device, out-of-band access to the network element (page 10, paragraph 139) via a remote modem in communication with the network element (Figure 5).

- j. Communicating from the network device via out-of-band access path with the remote modem (Figures 3a-6).
  - k. Authenticating a request to access the remote modem (page 8, paragraph 117).
  - l. Establishing a secure pathway over the out-of-band access path between the user computing device and the network element (Figure 6, page 6, paragraph 73).
  - m. Transmitting data for communicating operational status of the network element between the network element and the user computing device over the secure pathway (page 10, paragraphs 138-140).
15. Staples does not explicitly disclose a modem bank connected to a plurality of modems. However, Smith discloses a modem bank connected to a plurality of modems that authenticates and provides a connection to remote elements (page 2, paragraph 16). Staples and Smith are analogous art because they are from the same field of endeavor, networks. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Staples and Smith before him or her, to modify the system of Staples to include the modem bank of Smith. The suggestion/motivation for doing so would have been that traditional phone connections incur significant costs on each side of the carrier (page 2, paragraph 16).
16. Referring to claim 10, Staples teaches encrypting the communicated data to secure network communications (page 34, paragraph 413).
17. Referring to claim 11, Staples teaches:

- n. Receiving a first request via an out-of-band process to establish a connection with a network element (page 10, paragraph 139).
  - o. Receiving a security identifier to authenticate the request (page 8, paragraph 117).
  - p. Identifying a dial up number for accessing the remote modem (page 10, paragraphs 138-139).
  - q. Directing a server to select a specific modem to provide feedback related to said network device (page 10, paragraph 139).
  - r. Authenticating a second request (page 8, paragraph 117).
  - s. Authenticating a third request to access the network element (page 8, paragraph 117).
  - t. Transmitting data for communicating the operational status of the network element between the network element and a user computing device over a secure pathway established between the user computing device and the network element (page 10, paragraphs 138-140).
18. Staples does not explicitly disclose a modem bank connected to a plurality of modems, or capturing information associated with said first request to a log file.
- However, Smith discloses:
- u. A modem bank connected to a plurality of modems that authenticates and provides a connection to remote elements (page 2, paragraph 16).
  - v. Capturing information associated with said first request to a log file (pages 2-3, paragraph 24).



19. Staples and Smith are analogous art because they are from the same field of endeavor, networks. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Staples and Smith before him or her, to modify the system of Staples to include the modem bank of Smith. The suggestion/motivation for doing so would have been that traditional phone connections incur significant costs on each side of the carrier (page 2, paragraph 16).

20. Referring to claim 12, Staples teaches establishing a communications pathway by exchanging packets of information using one or more protocols (page 16, paragraph 197)

21. Referring to claim 13, Smith teaches issuing a command to the network device to authenticate access to the network device (page 2, paragraph 23).

22. Referring to claim 14, Staples teaches that the identifier is a security credential component (page 8, paragraphs 116-117).

23. Referring to claim 16, Smith teaches capturing session information (pages 2-3, paragraph 24).

24. Referring to claim 17, Smith teaches logging logon successes and failures (pages 2-3, paragraph 24).

25. Referring to claim 18, Smith teaches logging a timestamp (pages 2-3, paragraph 24).

26. Referring to claim 19, Staples teaches:

- w. Sending a request to establish a connection with a remote modem (page 10, paragraph 139).

- x. Selecting a modem (page 10, paragraph 139).
  - y. Receiving a response from said server to establish a link (pages 10-11, paragraph 140).
  - z. Dialing a telephone number to said pooled modem to establish a link (page 10, paragraph 138).
27. Referring to claim 20, Staples teaches:
- aa. Receiving login identification information (page 8, paragraph 116).
  - bb. Verifying the login information against a list of authorized users (page 8, paragraph 116).
  - cc. Notifying the user with a status response (page 8, paragraph 140).
28. Referring to claim 21, Staples teaches that the user information is a username and password (page 8, paragraph 116).
29. Referring to claim 22, Staples teaches that the status response is an approval or denial to access said remote modem (page 10, paragraph 140).
30. Referring to claim 25, Staples teaches that the second server is in communication with said first server, and configured to select a modem over which to communicate information communicated between the user computing device and the remote network elements (Figure 6, page 10, paragraph 139).
31. Claims 8, 9, 15, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Staples in view of Smith, as applied above and further in view of Xu et al's US Patent 6,151,628.

32. Referring to claim 8, Staples in view of Smith teaches the limitations of the parent claims. Staples in view of Smith fails to teach validating the number dialed to establish that the requesting modem is authorized to connect. However, Xu discloses determining if the user is allowed to connect due to the user phone number not matching with the database (column 12, lines 26-31). Staples in view of Smith and Xu are analogous art because they are from the same field of endeavor, networks. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Staples in view of Smith and Xu before him or her, to modify the system of Staples in view of Smith to include the number authentication of Xu. The suggestion/motivation for doing so would have been to be sure the accessing user is authorized (column 12, lines 26-29).

33. Referring to claim 9, Staples teaches using credentials for authentication (page 8, paragraph 117).

34. Referring to claim 15, Staples teaches

dd. Issuing a request from the user (page 10, paragraph 138).

ee. Receiving a telephone number for dialing (page 10, paragraph 139)

35. Staples in view of Smith fails to teaches validating the telephone number against a predetermined list. However, Xu discloses determining if the user is allowed to connect due to the user phone number not matching with the database (column 12, lines 26-31). Staples in view of Smith and Xu are analogous art because they are from the same field of endeavor, networks. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Staples in view of

Smith and Xu before him or her, to modify the system of Staples in view of Smith to include the number authentication of Xu. The suggestion/motivation for doing so would have been to be sure the accessing user is authorized (column 12, lines 26-29).

36. Referring to claim 23, Staples teaches:

ff. A server programmed to receive one or more requests from a user to access said remote device (page 10, paragraph 139) and authenticate that said one or more requests are submitted by an authorized user (page 8, paragraph 117).

gg. Wherein said remote modem is coupled to said remote device (Figure 5)

37. Staples does not explicitly disclose a modem bank connected to a plurality of modems. However, Smith discloses a modem bank connected to a plurality of modems that authenticates and provides a connection to remote elements (page 2, paragraph 16). Staples and Smith are analogous art because they are from the same field of endeavor, networks. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Staples and Smith before him or her, to modify the system of Staples to include the modem bank of Smith. The suggestion/motivation for doing so would have been that traditional phone connections incur significant costs on each side of the carrier (page 2, paragraph 16).

38. Staples in view of Smith fails to teaches accepting only communications from a predetermined set of phone numbers associated with the modem bank by validation that a phone number associated with the incoming call is within the predetermined set of addresses or phone numbers. However, Xu discloses determining if the user is

allowed to connect due to the user phone number not matching with the database (column 12, lines 26-31). Staples in view of Smith and Xu are analogous art because they are from the same field of endeavor, networks. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Staples in view of Smith and Xu before him or her, to modify the system of Staples in view of Smith to include the number authentication of Xu. The suggestion/motivation for doing so would have been to be sure the accessing user is authorized (column 12, lines 26-29).

39. Referring to claim 24, Staples teaches that the remote device cannot be accessed without authenticating said user (page 8, paragraphs 116-117).

40. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Staples in view of Smith as applied above, and further in view of Craig et al's US Publication 2001/0024446 A1.

41. Staples in view of Smith discloses all the limitations of the parent claim. Staples in view of Smith does not explicitly disclose a server using a rotational selection for selecting which modem to use. However, Craig discloses a modem queue server that writes data into a selected modem queue (page 3, paragraph 44) and the modem queue server using a round robin strategy (page 4, paragraph 48). Staples in view of Smith and Craig are analogous art because they are from the same field of endeavor, network communication. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Staples in view of Smith and Craig

before him or her, to modify the system of Staples in view of Smith to include the round robin modem selection of Craig. The suggestion/motivation for doing so would have been to be able to process data streams with different data formats (page 1, paragraph 9).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CORDELIA KANE whose telephone number is (571)272-7771. The examiner can normally be reached on Monday - Thursday 8:00 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

/C. K./  
Examiner, Art Unit 2432

/Gilberto Barron Jr/  
Supervisory Patent Examiner, Art Unit 2432